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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,996	04/10/2006	Yoshiki Nakagawa	UNIU110.001APC	6606

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

BOYLE, ROBERT C

ART UNIT	PAPER NUMBER
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1764

NOTIFICATION DATE	DELIVERY MODE
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06/02/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
efiling@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No. 10/541,996	Applicant(s) NAKAGAWA ET AL.	
	Examiner ROBERT C. BOYLE	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57,58,62-65,67,68 and 77-86 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57,58,62-65,67,68 and 77-86 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. No new grounds of rejection have been introduced, therefore this action is properly deemed FINAL.

Claim Rejections - 35 USC § 103

3. Claims 57-58, 62-65, 67-68, 77-81, 83-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fujita** (WO 00/20498) in view of **Reid** (US 2,859,197). The rejection is adequately set forth in paragraphs 5-14 in the office action mailed on 1/13/2011 and is incorporated here by reference.
4. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Fujita** (WO 00/20498) in view of **Reid** (US 2,859,197) and **Inoue** (US 6,255,392). The rejection is adequately set forth in paragraphs 15-18 in the office action mailed on 1/13/2011 and is incorporated here by reference.
5. Claims 57-58, 62-65, 67-68, 77-81, 83-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fujita** (WO 00/20498) in view of **Homan** (US 4,585,836). The rejection is adequately set forth in paragraphs 19-29 in the office action mailed on 1/13/2011 and is incorporated here by reference.

6. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Fujita** (WO 00/20498) in view of **Homan** (US 4,585,836) and **Inoue** (US 6,255,392). The rejection is adequately set forth in paragraphs 30-33 in the office action mailed on 1/13/2011 and is incorporated here by reference.

Response to Arguments

7. Applicant's arguments filed 4/13/2011 have been fully considered but they are not persuasive.

Fujita and Reid

8. Applicant argues that since there is no hot melt extrusion in Fujita, there would have been no reason to use the processing additives of Reid. This is not persuasive.

9. Fujita teaches that additives may be added, including plasticizers (§ 242), solid state modifiers (§ 244), thixotropic agents (§ 247), and other additives (§ 250-252). Thus, Fujita is open to additives that provides improved workability (§ 247) and Reid teaches the dimethyl adipate is a processing aid (col. 1, ln. 15-19). Therefore, Fujita is open to the addition of a processing aid such as dimethyl adipate.

10. Furthermore, while Fujita does not specifically recite melt extrusion occurs, Fujita is applicable to a broad spectrum of end uses, including electronic materials, cable insulation sheaths, adhesives, coatings, foams, films, gaskets, molding compounds (§ 578). Additionally, Fujita uses elevated temperatures in their examples to produce molding (§ 445, 590, 614-615).

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Therefore, Fujita does not exclude melt extrusion, and processing is occurring at elevated temperatures.

11. Furthermore, Reid teaches a number of additional benefits that are not directly related to the melt processing, including excellent light stability, good heat stability, good spew resistance, and is non-toxic, non-allergic, and relatively odorless, and does not appreciably increase the tendency of orientated films or filaments to shrink at elevated temperatures (col. 2, ln. 7-13). It would have been obvious to combine the dimethyl adipate of Reid as a processing aid to obtain these benefits.

12. While Reid does not contain the crosslinkable silyl group, Reid is not presented to teach this limitation but Fujita is. Reid is used as a teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, MPEP 2145; *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973); *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention. In this case, Reid teaches the use of dimethyl adipate as an additive.

13. Regarding the use of methyl ester groups to suppress delay of curing, this limitation is not present in the claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., suppress delay of curing) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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14. Regarding the interchangeability of dimethyl adipate and diethyl adipate, as there are only two compounds listed, it would have been well within the skill of one of ordinary skill to conduct routine experimentation to determine which of the two to use. Furthermore, the genus is small enough to be instantly envisaged by one of ordinary skill of the art. Therefore, the recitation of diethyl adipate does not traverse the finding of obviousness.

Fujita and Homan

15. Regarding suppressing the delay in curing, this limitation is not present in the claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., suppress delay of curing) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

16. Applicant presents the data in the Declaration of 11/15/2010 to rebut the presumption of structural similarity. However, this data presents comparative data regarding the different esters, but the examiner's comparison was not directed to the esters used by Homan and the instant claims, but was used to show that the silicone polymers of Homan were reasonably pertinent to the vinyl polymers of the instant claims. Notably, the polymers of Homan and the polymers of the claims have structurally similar crosslinking groups (siloxo groups). Thus, the prima facie case is not based on structural similarity, but using the ammonia scavenger of Homan with the polymer of Fujita. The structural similarities are pointed out to establish that Homan is analogous art, and not to provide a basis of obviousness.

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17. Furthermore, even if the structural similarities were relied on for a finding of obviousness, Applicant's data does not provide a rebuttal to the structural similarities of the claimed polymers and the polymers of Homan because the data presented compares the dimethyl adipate with different esters, and does not compare the claimed polymers with the polymers of Homan.

18. Furthermore, Applicant's data presented in the Declaration filed 11/19/2010 does not amount to unexpected results because the data is inconsistent with the data provided in a declaration filed on 4/14/2010, where the presence of dimethyl adipate resulted in the skinning time not changing, as opposed to decreasing. This deviation has not been explained, and therefore the data is not persuasive.

19. Additionally, the data is not commensurate with the scope of the claims as required by MPEP 716.02(d) because data on only one of the claimed esters is provided while 16 esters are claimed. Additionally, the data uses only one vinyl polymer and one amine compound, whereas innumerable vinyl polymers and amine compounds are within the scope of claim 1.

20. Also, the references presented in the rejections above, Reid and Homan, provide persuasive motivation to use the claimed esters which is not overcome by the data presented in the Declaration. The references contain reasoning that would lead one of ordinary skill in the art to the conclusion that the methyl esters provide better stability. Homan teaches that such esters are ammonia scavengers, which would slow down the rate of curing. Reid teaches the dimethyl adipates have good light and heat stability, and adipates with higher alkyl esters have an increased tendency to spew.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT C. BOYLE whose telephone number is (571)270-7347. The examiner can normally be reached on Monday-Thursday, 9:00AM-5:00PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT C BOYLE/
Examiner, Art Unit 1764

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1764